AN APPARATUS AND METHOD
FOR TWO COMPUTING ELEMENTS IN A
FAULT-TOLERANT SERVER TO EXECUTE INSTRUCTIONS IN LOCKSTEP

Abstract of the Disclosure

An apparatus and method for a first computing element and a second computing element to execute in lockstep in a fault-tolerant server. In one embodiment, the first computing element provides a first instruction to a communications link and the second computing element provides a second instruction to a communications link. In one embodiment, a first local input-output (I/O) subsystem and a second local I/O subsystem are each in communication with the communications link. The first and/or the second local I/O subsystem compare the first instruction and the second instruction. In one embodiment, the first and second local I/O subsystems indicate a fault of the first computing element or the second computing element. Such a fault may be determined by a miscompare of the first instruction and the second instruction.